

# Use of BLS API

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### 0.1 Setup

```
knitr::opts_chunk$set(echo = TRUE)
```

### 0.2 Use the BLS API to retrieve the data

```
# Set the library and install the packages
library(devtools)
library(blsR)

# The introduction about this package: https://cran.r-project.org/web/packages/blsR/blsR.p
devtools::install_github("grodit/blsR")

# Acquire the API by registering through https://www.bls.gov/developers/home.htm
bls_set_key("your personal API")

test_series <- get_series(series_id = "series id you found",
                          start_year = 2016,
                          end_year = 2024,
                          api_key = bls_get_key())
```

I work through the series number by <https://data.bls.gov/PDQWeb/la>, and we discover that the series number for each county is “FCN+Fips code+00000000”

### 0.3 ACS API

```
# Set the library and install the packages
library(censusapi)
library(tidycensus)

# Acquire the API by registering through https://api.census.gov/data/key_signup.html

census_api_key("your api key", install = TRUE, overwrite = TRUE)
# Acquire the API by registering through https://api.census.gov/data/key_signup.html

#The main function to retrieve the data here are https://cran.r-project.org/web/packages/ti

#to check the name of the variable
v15 <- load_variables(2015, "acs5", cache = TRUE)
View(v15)

# for example, if I want to know the age
# here is the explanation of the codebook: https://data.census.gov/table/ACSDT5Y2022.B0100

nc_acs_2015 <- get_acs(geography = "county",
  year = 2015,
  variables = c(age = "B01001A_003"),
  state = "NC",
  survey = "acs5",
  output = "wide")
```